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Kentucky Economic Review

by Merl M. Hackbart*

Analysts suggest that had the Federal Reserve (Fed) moved toward the upper limits of its 1984 monetary target growth rate, strong economic growth could have been accomodated throughout 1984. However, the Fed apparently decided to take early action to influence the rate of the recovery rather than to intervene at a later point—a common characteristic of Fed policy—and it tightened the growth of the money supply. The full impact of this change in Fed policy is unclear, however, as recent data suggest that while the recovery is still strong, spot weaknesses are beginning to surface in sectors sensitive to interest rates.

For example, revised data show that the increase in the national Composite Index of 12 Leading Indicators, witnessed throughout 1983, continued through April, indicating a progressively stronger economy. However, preliminary data for May signalled a slight stall in this overall economic indicator series by remaining at basically the same level as in April. Consistent with the composite index, revised figures for growth in real Gross National Product (GNP) for the first quarter of 1984, at a rate of increase of 9.7 percent, give evidence of substantial improvement, expanding considerably upon the 5.0 percent growth rate of the fourth quarter of 1983. The U.S. Commerce Department's "flash" estimate for second quarter real GNP, showing a 5.7 percent increase, suggests health in the national economy, with growth continuing at a somewhat more moderate pace.

Another encouraging sign has been the modest adjustments in the Consumer Price Index and in the Producer Price Index throughout 1984. Other indications of a strong national recovery in the first quarter included a continuing decline in the civilian unemployment rate—down to 7.9 percent, an increase in authorized housing permits, and a rise in auto sales to an annualized 10.6 million units, compared to 9.9 million units in the last quarter of 1983.

Data for the first quarter of 1984 suggest that the Kentucky economy is beginning to mirror the national recovery, reversing the declines that had continued throughout most of last year. In 1983, for the fourth straight year, the annual Kentucky civilian unemployment rate increased, reaching a level of 11.7 percent. However, in the first quarter of this year, it dropped to 9.6 percent, on a seasonally adjusted basis, extending the decline that had begun in the third quarter of 1983. Seasonally adjusted April data show a 9.3 percent Kentucky civilian unemployment rate, which is more than one and a half percentage points above the national estimate. However, the Kentucky unemployment rate has been falling almost a percentage point a quarter for the last three quarters, closing the gap on the U.S. rate.

Several aspects of the Kentucky employment situation warrant comment. Manufacturing employment for the first quarter of 1984 is 6.4 percent above a year ago, and 2 percent above fourth quarter, 1983. Durables manufacturing seems to have rebounded most impressively, with an 11.7 percent increase over last year. Construction employment also shows healthy improvement with a 12.3 percent increase over a year ago. Early second quarter adjusted construction employment data indicate some reversal of this trend, however, perhaps reflecting the effect of increasing interest rates. Employment in coal mining is 5 percent below the 1983 first quarter level. Looking at seasonally adjusted data, coal mining employment seems to have reached its lowest point in the third quarter of 1983, and has been on a gradual upswing since then.

The recent improvement in coal mining employment is paralled by increases in coal production; it is 25.5 percent higher in eastern Kentucky and 19.3 percent higher in western Kentucky than production in the first quarter, 1983. Care should be used in reading these statistics, as improvements in the coal industry may reflect increased stockpiling in anticipation of the labor contract negotiations later this year, as well as overall improvement in the general national economy.

Kentucky tax receipts are also beginning to reflect a general upturn in the state's economy. After adding May revenue, total General Fund receipts were running 6.1 percent ahead of last fiscal year. Sales and use taxes increased more rapidly than receipts in general, and showed 7.1 percent improve-

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H. Brinton Milward, Associate Professor of Management and Public Administration, College of Business and Economics, University of Kentucky, has recently been named Director of the new Center for Business and Economic Research. Professor Milward, a native of Lexington and a graduate of the University of Kentucky, received his Ph.D. in Public Administration from Ohio State University in 1978. He returned to Kentucky and the College of Business and Economics in 1979, after teaching for several years at the University of Kansas. Professor Milward has published widely in both the management and public policy fields; among his policy interests are energy, housing, and higher education. He has received research funding from a variety of sources, including Ashland Oil, the Institute for Mining and Minerals Research, the Council of State Governments, the U.S. Department of Education, and the states of Ohio and Kansas.

As noted in this column last issue, the Center for Business and Economic Research has been established to be the principal research unit of the College of Business and Economics at the University of Kentucky, coordinating and engaging in a variety of research activities benefitting both the public and private sectors of the Commonwealth. We join in welcoming Professor Milward to his new position and wish him well as he undertakes to guide the Center's research, statistical information service, and publications programs.

* * *

With the reorganization of the College of Business and Economics as described, and the appointment of Professor Milward to direct the new research center, Professor Don M. Soule, Acting Director of the Center for Applied Economic Research, returns to full-time teaching and research within the Department of Economics. We wish to take this opportunity to acknowledge the many contributions Dr. Soule made while Acting Director, especially his willingness to educate the staff, as well as the public in general, on a variety of issues related to the Kentucky economy, but particularly in the area of its tax structure. Dr. Soule's ability to interpret, analyze and write about the Kentucky economy in a manner that is informative and interesting enhanced both the quality and coverage of this publication, and the work of the Center in general. We are therefore pleased to note that Professor Soule will continue to prepare analyses of the Kentucky economy as one of the research associates who cooperate in the work of the new Center.

* * *

The Coal Information Network of Kentucky (CINK), has been issuing a series of bibliographies under the name "Coalfinder." The fourth in this series, "Statistical Sources on Coal," has been prepared by Frances E. Ross, Data Analyst, Center for Business and Economic Research and is available, upon request, from Albert M. Bryson, Secretary of CINK, 1812 Hilton Avenue, Ashland, KY 41101.

It is with regret that we announce the resignation of Frances Ross from the staff of the Center for Business and Economic Research. Among many things, Ms. Ross has been the energy sector specialist for the Kentucky Economic Information System and her expertise and diligence will be missed. We wish her well in her new position with the McDowell Cancer Network, University of Kentucky Medical Center.

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This publication provides current information concerning the Kentucky economy. It is a forum for the publication of short expository articles, analyses of some aspect of the Kentucky economy, forecasts of the Kentucky economy, and tables of selected data chosen as indicators of developments in the Kentucky and national economies. The publication also sometimes includes information about enhancements to the Kentucky Economic Information System (KEIS).

Articles submitted for publication should be sent to the Editor at the address given above. All submissions will be reviewed independently by persons recognized as knowledgeable in the specific subject discussed. However, the ultimate responsibility for content rests with the author.

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The 1984-86 Kentucky State Budget

by Ronald J. Carson*

There is little question that the most important policy process in Kentucky state government is the development of the biennial state budget. Since the budget is the Commonwealth's principal instrument of resource allocation, it reflects the state government's public priorities. The development of the 1984-86 Kentucky state budget also reflected evolution in this process to accommodate changing governmental, fiscal, legal, and political environments. The following paper describes the major features of the preparation and adoption process for the 1984-86 Budget of the Commonwealth of Kentucky and addresses issues related to its execution. The analysis focuses solely on the General Fund budget for Kentucky's Executive Branch.

Recent History

A description of some recent budget history is useful in attempting to understand what happened as the 1984-86 budget proceeded through the preparation and enactment phases.

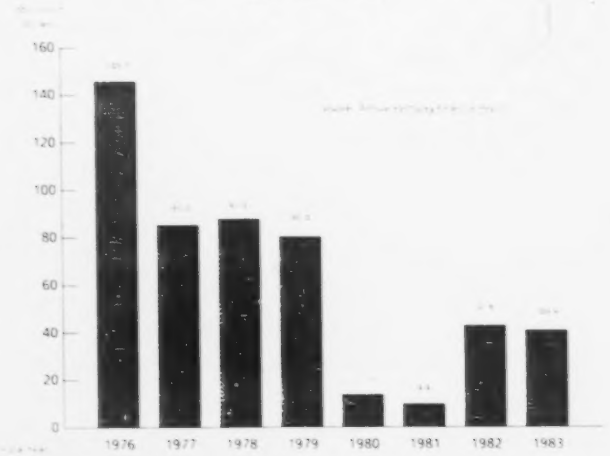
Fiscal Environment. From fiscal year (FY) 1976 through FY 1983, General Fund expenditures exceeded revenue receipts by $225 million. In fact, expenditure growth outstripped revenue growth in six of the eight years; expenditures rose by almost 115 percent, while revenue receipts grew by only 104 percent. Inflation, as measured by the national Consumer Price Index, increased 77 percent during this time. The Commonwealth managed to maintain a balanced budget through two sets of actions: "spending down" previously accrued surpluses and transferring non-revenue receipts (special, agency-specific funds) into the General Fund.

Since June 1980, and until October 1983, the Commonwealth experienced shortfalls in General Fund revenue amounting to over $1 billion. These revenue shortfalls—shortages in either estimated or actual revenue as compared to the original revenue estimates—were largely the result of the national economic recession. During roughly this same period, state government adjusted its operations, including reducing its full-time workforce by over 20 percent and eliminating or substantially curtailing programmatic efforts in a number of areas.

Kentucky also experienced a substantial decline in federal funds; since 1980, transfers from the federal government are down $900 million. Unlike many Southern states, Kentucky did not benefit from the massive national defense buildup which has occurred since 1980. Moreover, any flexibility the Commonwealth might have had to react to these converging and adverse economic circumstances was severely reduced by its lack of a substantial surplus (see Figure 1).

The situation in FY 1984 was more severe than in previous years. Even with the corrective budget shortfall actions taken in October, 1983, state expenditures were again estimated to exceed revenue receipts, this time by approximately $104 million. During FY 1984, surpluses were again carried forward and non-revenue receipts were transferred into the General Fund.

Figure 1: Unappropriated Surplus at End of Fiscal Year
Fiscal Years 1976-83



Statutory and Legal Environment. In 1982, the Kentucky General Assembly, attempting to strengthen its role in the budgetary process, enacted House Bill 649. It created a new section of the Kentucky Revised Statutes (KRS), Chapter 48, and effectively restructured the statutory basis for the state's budget process. The key aspects of this bill, which became effective on July 1, 1983, included provisions that:

- mandated that the Governor submit the executive budget recommendation by either the 10th (for a governor's second budget) or the 15th (for a governor's first budget) legislative day;
- required a budget reduction plan, thereby placing limits on a governor's authority to redirect the budget in cases of revenue shortages;
- authorized the Legislative Research Commission (LRC) to write the budget instructions to state agencies;
- required that the Legislative Branch draft a statutory budget memorandum, a companion document to the appropriations act, to indicate more fully the legislative intent; and
- required that the budget be in the form of a joint resolution rather than a bill.

Subsequent to the adjournment of the 1982 legislative session, both the Executive and Legislative Branches sought legal clarification from the Judicial Branch regarding the relative powers of the two branches. The 1982 General Assembly had passed a series of statutes concerning appointments, regulations, interim LRC powers, block grants, and reorganizations, as well as the budget bill just described. These statutes, taken together, greatly enhanced the power of the legislature's agent, the LRC, at the expense of the Executive. The resulting

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TABLE 1

THE CHANGING 1984-86 GENERAL FUND BUDGET ENVIRONMENT

	General Fund Budget Scenario After October 15, 1983, Revenue Estimate (in millions of dollars—rounded)			General Fund Budget Scenario After January 19, 1984, Revenue Shortfall (in millions of dollars—rounded)			General Fund Budget Scenario After January 26, 1984, in Executive Budget Including Proposed New Tax Revenue (in millions of dollars—rounded)		
	Budgeted FY 1984	Estimated FY 1985	% Increase FY 1985 over FY 1984	Budgeted FY 1984	Estimated FY 1985	% Increase FY 1985 over FY 1984	Budgeted FY 1984	Estimated FY 1985	% Increase FY 1985 over FY 1984
Resources									
Carry Forward from Previous Year	$ 40.9	$ 4.9		$ 40.9			$ 40.9		
Non-Revenue Receipts	63.7			63.7			63.7		
Revenue Estimate	2,355.8	2,532.6	7.5	2,342.8	2,490.6	6.3	2,342.8	2,588.6	10.5
Total Resources	2,460.4	2,537.5		2,447.4	2,490.6		2,447.4	2,588.6	
Total Expenditures/Appropriations	2,455.5	2,537.5	3.3	2,447.4	2,490.6	1.8	2,447.4	2,579.3	5.4

"friendly suit," LRC vs Brown, became a major separation of powers case. The Supreme Court Opinion in this case, rendered January 19, 1984—one week before the budget had to be introduced—severely limited legislative authority for the interim between General Assembly sessions, but upheld the concept of legislative supremacy in the budgetary realm. However, the court ruled that the joint budget resolution requirement was unconstitutional.

The Governor's 1984-86 Budget

Revenue Forecasts. In accordance with the requirements of KRS 48.120, the Revenue Cabinet issued its General Fund revenue estimates for the 1984-86 biennium on October 15, 1983. These estimates were:

FY 1984 $2,355,760,000
FY 1985 $2,532,650,000
FY 1986 $2,707,430,000

Two significant assumptions were embodied in these figures: 1) all coal severance tax receipts would be retained in the General Fund, and 2) the Legislature would repeal the existing "sunset" provisions regarding the accelerated cost recovery system (ACRS) portion of the federal Economic Recovery Tax Act of 1981. The practical effect of the former assumption involved keeping $94 million in the General Fund over the biennium while the effect of the latter assumption involved retaining $186 million in the state's corporate income tax base over the biennium. Both items were crucial in the Governor's attempt (and, subsequently, the General Assembly's effort) to present a balanced budget.

On January 19, 1984, the Revenue Cabinet officially revised downward the October 15, 1983, preliminary revenue estimates. The new estimates were:

FY 1984 $2,324,800,000
FY 1985 $2,490,640,000
FY 1986 $2,655,780,000

The combined effect of the downward revisions in all three fiscal years was $106,570,000. Largely as a result of this new revenue environment, the Governor decided to seek a tax increase.

The macro-budgetary situation confronting the Governor can be seen in Table 1. The key statistic is the percentage growth in total expenditures/appropriations. While direct tax revenue growth was estimated to be reasonably healthy, because of the way in which the current year budget had been balanced, the forecasts suggested that the revenue available for expenditure/appropriation growth would be, at best, minimal. In view of the vast array of public service needs facing the Commonwealth, particularly in the area of elementary and secondary education, the Governor was unwilling to propose a budget recommending only a 1.8 percent aggregate expenditure increase; therefore, she decided to seek a $324 million revenue enhancement package.

Expenditure Recommendations. On January 26, 1984, Governor Collins presented her proposed Executive Budget to a joint session of the Kentucky General Assembly. Several aggregate aspects were especially noteworthy:

- without new revenue, FY 1985 proposed expenditures would have exceeded FY 1984 budgeted expenditures by only 1.8 percent;
- the proposed additional General Fund revenue of $324 million was only 6.3 percent of the total biennial estimated revenue; and,
- even with the proposed new revenue, FY 1985 proposed expenditures would have been $34 million less than the level of FY 1984 expenditures authorized by the 1982 General Assembly, because there had been a 10 percent ($270 million) revenue shortfall in FY 1984 compared to the revenues for FY 1984 forecasted in 1982.

To place the Governor's proposed budget in historical perspective, Table 2 compares expenditure growth over the last several bienniums. As shown, even with the proposed tax increases, the Governor's proposed 1984-86 Executive Budget contemplated only modest expenditure growth when compared to previous budgets.

TABLE 2

STATE BUDGET EXPENDITURE GROWTH IN GOVERNOR'S EXECUTIVE BUDGETS AS INTRODUCED*

Fiscal Biennium	Governor	Percentage Increase
1972-74	Ford	10.2%
1974-76	Ford	18.5
1976-78	Carroll	19.6
1978-80	Carroll	10.9
1980-82	Brown	9.1
1982-84	Brown	9.7
1984-86	Collins	5.4

*In each case, projected General Fund expenditures in the first year of the new biennium are compared with projected General Fund expenditures in the previous year.

Source: Commonwealth of Kentucky, *Executive Budget*, various years from 1972 through 1986.

TABLE 3

GOVERNOR'S PROPOSED DISTRIBUTION OF ADDITIONAL FY 1985 GENERAL FUND APPROPRIATIONS

Area of State Government	Proposed FY 1985 Nominal Dollar Increase Over FY 1984	Percent Of New Dollars
Local School District Payments (Including Governor's Educational Improvement Program)	$ 65,613,300	50.7
Teachers' Retirement System	9,668,700	7.5
Subtotal	75,282,000	58.2
Institutions of Higher Education	17,007,900	13.1
Local Government Economic Assistance Fund	5,900,000	4.6
Local Jails	3,869,000	3.0
Benefit Payments to Needy	9,201,800	7.1
Corrections	6,006,000	4.6
Commerce Cabinet Debt Service*	11,399,900	8.8
All Other Agencies and Programs of State Government	720,600	0.6
Total	$129,387,200	100.0

*The 1982 General Assembly authorized $150 million in bonds for various economic development projects. Bonds for many of these projects were not yet sold. Therefore, first time debt service was deferred until FY 1985. Thus, the Executive Budget proposal contained the financing of these commitments for the first time.

The spending priorities of the Governor's budget are outlined in Table 3. Clearly, education was to receive the bulk of the new money. In fact, after accounting for this number one priority, statutory and/or legal obligations (the Local Government Economic Assistance Fund and the Commerce Cabinet debt service requirements), and secondary programmatic priorities (local jails, benefit payments to the needy, and corrections), the rest of state government's programs and activities would receive essentially no increase. In real dollar terms (i.e., controlled for inflation), this actually represented a decreased level of funding for those programs in FY 1985.

For the biennium as a whole, the Governor's Executive Budget proposal featured the following major spending priorities:

* a $297 million Student Learning Improvement Program for elementary and secondary education;
* a 30 percent increase in funding for local jails;
* a substantial increase in funding for the Corrections Cabinet, including a new $35 million medium security prison;
* increases in human service program funding for the elderly, for juveniles and for the mentally ill; and
* a 5 percent annual salary increase for school teachers and state employees.

Tax Changes. The Executive Budget proposal included a major tax reform program, including updated rate structures for the individual income and corporation license taxes and extension of the sales tax to previously untaxed items. These changes were intended to make the Kentucky revenue structure more progressive and were estimated to produce $98 million in new revenues for FY 1985 and $226 million in FY 1986. The proposed changes were:

* Individual Income Tax—The standard deduction would be raised from $650 per taxpayer to $1,000. Two new rate categories would have been added to tax income between $15,000 and $50,000 at 7 percent, and all income over $50,000 at 8 percent. The changes were to be effective January 1, 1985, and would have yielded $43 million in new revenue in FY 1985 and $109 million in FY 1986. The last change in the standard deduction had been in 1976 when it was increased from $500 to $650. The change in the rate structure would have been the first since 1950 when the 6 percent rate was added for all income over $8,000. Prior to 1950, all income over $5,000 was taxed at 5 percent.
* Corporation License Tax—This tax, an annual levy on corporations for the privilege of doing business in Kentucky, has been, since 1926, 70 cents per $1,000 of capital employed. The proposal was to raise the rate to $1.75 per $1,000 of capital employed, effective on or after January 1, 1984, and was estimated to produce $12 million in FY 1985 and $27 million in FY 1986.
* Sales Tax—The Governor's proposal was to extend the 5 percent sales and use tax to services not previously taxed in Kentucky; no increase in the rate was proposed for any item. Services proposed for inclusion were repair and installation of tangible personal property (auto repair, appliance installation, shoe repair, etc.), lease and rental of tangible personal property, laundry, dry cleaning, television cable service, computer and data processing services, and miscellaneous business services. The extension of the sales tax was to become effective December 1, 1984, and was estimated to generate $43 million in FY 1985 and $90 million in FY 1986.

Immediately after the Governor introduced the Executive Budget proposal, both the Kentucky Senate and House commenced several weeks of extensive budget hearings which focused on the revenue mix being proposed, individual components of the Governor's educational reform package, and spending priorities for state agencies. On February 24, 1984, the Governor amended the original revenue proposal and presented a new tax package. It contained four major features:

* a 5 percent "flat-rate" individual income tax to replace the existing graduated individual income tax structure;
* a phase-out, over a 3-year period beginning July 1, 1986, of the limitation on the depreciation allowed corporations when computing taxable income (ACRS);
* a retention of the corporate license tax feature of the original revenue proposal; and
* a reduction in the total amount of state inheritance tax Kentucky citizens would pay.

The net revenue effect of this new set of proposals was exactly the same as was contemplated under the original proposal—$98 million in FY 1985 and $226 million in FY 1986. However, the tax mix was changed, the sales tax extension option was discarded, and a small measure of inheritance tax relief was added. The Governor also announced that this new tax package would be combined in one legislative bill, ultimately House Bill 879, with all the educational reform proposals.

The Budget in the General Assembly

The appropriations bill for the Executive Branch (House Bill 474) was reported out of the House Appropriations and Revenue Committee on March 22, after seven weeks of daily budget hearings. The day before, the Governor had withdrawn the revised tax proposal, House Bill 879, acknowledging that there was not sufficient support for its passage in the full House. By a vote of 89-10, House Bill 474 was passed on March 23. On March 27, the Senate passed its committee substitute to House Bill 474 by a vote of 34-2. On March 28, the two chambers refused to concur on the respective versions of the budget and a Conference Committee was appointed to resolve the differences.

Final passage of the Executive Budget, under the no-tax increase revenue scenario, proved to be very difficult. The variance between both expenditure and revenue levels in the budgets passed by the two chambers strained the lawmakers' abilities to find a common ground for agreement. Nonetheless, a compromise was achieved, which, for the most part, reflected the spending priorities of the House rather than of the Senate. The major features of the final compromise included:

- mandating a 2 percent and a 3 percent salary adjustment for state employees and school teachers for FY 1985 and FY 1986, respectively; the House had proposed 3 percent for each year while the Senate proposed no increase for FY 1985 and 5 percent for FY 1986;
- retaining $47 million a year of coal severance tax receipts in the General Fund; the Senate had proposed transferring these monies to the Road Fund to help defray debt service payments on road bonds;
- phasing in the full ACRS over two years beginning in FY 1986, a revenue feature of the Senate's version of the budget; the adoption of this feature means that the Governor and the General Assembly will have to address the fundamental issue of the state corporate income tax base again in the 1986 session of the General Assembly; and
- making a series of programmatic and funding shifts involving the Council on Agriculture, the Secretary of the Education and Humanities Cabinet, funding for cancer research and indigent care at state university hospitals, local school construction debt service, and community college construction.

The final version of the budget, in the form of a Free Conference Committee report, was passed on March 30 by a vote of 70-24 in the House and 32-4 in the Senate. Table 4 shows the level of appropriations for the cabinets and agencies of the Executive Branch in the General Assembly's enacted Budget of the Commonwealth and compares them to the level of appropriations recommended by the Governor in the Executive Budget proposal. Obviously, most areas received substantially less in the final, no-tax increase version of the budget than under the Executive Budget proposal. More importantly, several areas will receive even less in FY 1985 than in FY 1984. Only the Revenue Cabinet received more under the General Assembly's budget than what it would have received under the Governor's budget, although capital construction funds were also added in the General Assembly's budget.

On March 30, the General Assembly adjourned and then reconvened on April 12 to consider gubernatorial vetoes. For the first time since the 1940s, a Kentucky governor exercised the constitutional "legislative" power by vetoing two separate line items in the budget bill. One item involved community college projects in Prestonsburg and Hazard. The second involved general purpose educational buildings. In both instances, the Governor contended that the items had circumvented the normal budget review process, had not been contemplated in the Executive Budget nor the budgets that passed either the House or the Senate, and simply had been inserted at the last possible moment in the Free Conference Committee. The Governor's vetoes of the two line items were sustained in the House on April 13, by a vote of 42-50, bringing the 1984-86 budget preparation and adoption processes to a close.

The final status of the General Fund, including the budgets for all three branches of state government, is shown in Table 5. Revenue is estimated to grow by 6.5 percent in each year

TABLE 4
APPROPRIATIONS RECOMMENDED IN THE GOVERNOR'S EXECUTIVE BUDGET COMPARED TO THE EXECUTIVE BRANCH APPROPRIATIONS IN THE GENERAL ASSEMBLY'S ENACTED BUDGET

		FY 1985			FY 1986		
Cabinet/Agency	FY 1984 Budget	Governor's Budget	General Assembly's Budget	Difference	Governor's Budget	General Assembly's Budget	Difference
Government Operations	$ 102,889,900	$ 98,220,000	$ 95,477,400	$ (2,742,600)	$ 111,058,600	$ 105,267,700	$ (5,790,900)
Commerce	21,825,100	32,133,300	31,218,400	(914,900)	35,396,700	31,387,000	(4,009,700)
Corrections	59,531,500	83,871,500	77,768,300	(6,103,200)	94,324,900	82,675,100	(11,649,800)
Education/Humanities	1,171,886,820	1,250,884,200	1,190,586,600	(60,297,600)	1,429,874,300	1,261,130,900	(168,743,400)
Energy	13,560,000	10,278,700	8,873,000	(1,405,700)	13,341,200	8,559,800	(4,781,400)
Finance/Administration	16,264,500	15,060,000	14,882,500	(177,500)	16,867,000	16,628,000	(239,000)
Higher Education	421,198,900	435,026,200	427,452,300	(7,573,900)	466,164,800	453,808,900	(12,355,900)
Human Resources	387,463,400	398,242,000	393,032,000	(5,210,000)	429,059,300	417,170,300	(11,889,000)
Justice	61,888,100	63,273,100	59,173,200	(4,099,900)	67,453,600	62,699,200	(4,754,400)
Labor	1,386,200	1,460,700	1,381,500	(79,200)	1,535,000	1,394,800	(140,200)
Natural Resources/Environmental Protection	23,853,400	23,781,400	23,773,100	(8,300)	26,289,500	26,135,300	(154,200)
Public Protection/Regulation	25,211,200	25,610,800	24,847,700	(763,100)	26,979,200	25,089,500	(1,889,700)
Revenue	33,544,300	36,645,200	40,487,000	3,841,800	38,245,100	43,199,000	4,953,900
Tourism	26,421,300	26,662,200	26,559,100	(103,100)	31,920,300	30,225,100	(1,695,200)
Transportation	2,364,200	2,162,200	2,340,700	(178,500)	2,270,200	2,442,700	172,500
Capital Construction	1,505,000	0	200,000	200,000	0	500,000	500,000
Executive Branch Total	$2,370,793,820	$2,503,311,500	$2,418,052,800	$(85,258,700)	$2,790,779,700	$2,568,313,300	$(222,466,400)

of the biennium, which includes minor revenue adjustments enacted by the 1984 General Assembly. Expenditures are authorized to increase by only 1.9 percent in FY 1985 and by 6.3 percent in FY 1986.

TABLE 5

1984-86 BUDGET SUMMARY: GENERAL FUND

	FY 1984 Budgeted	FY 1985 Enacted	FY 1986 Enacted
Resources			
Beginning Resources	$ 40,871,000	$	$
Administrative Cost Receipts		5,392,100	5,755,000
Non-Revenue Receipts	63,701,000	4,728,000	1,250,000
Revenue Estimate	2,342,850,000	2,494,438,385	2,655,958,585
Total Resources	$2,447,422,000	$2,504,558,485	$2,662,963,585
Expenditures/Appropriations			
Regular, Special and Continued Appropriations and Necessary Governmental Expenses	2,444,863,300*	2,493,090,900	2,649,857,600
Current Year Appropriations	2,588,700		
Total Expenditures/ Appropriations	2,447,422,000	2,493,090,900	2,649,857,600
Budget Reserve	$ 0	$ 11,467,585	$ 13,105,985

*This figure assumes a FY 1984 lapse to surplus of at least $2,374,400.

Budget Execution

Traditionally, there is a pause between final budget enactment and the budget cycle's execution phase, which commences on the first day of the new fiscal biennium. However, as with many other aspects of the 1984-86 state budget, again tradition did not hold. By mid-June, as this article is being written, and as the new biennium approaches on July 1, several legal challenges have placed the status of the budget in jeopardy.

On May 14, the Kentucky Reinsurance Association, a group representating the interests of state insurance carriers, filed suit to prevent the transfer of over $7 million in agency funds to the General Fund. As a result of the suit, the Franklin Circuit Court issued an order prohibiting the Secretary of Finance and Administration from authorizing this fund transfer. At this writing, this suit is still pending.

On May 17, in Attorney General's Opinion 84-184, the state's chief legal officer declared that certain parts of the 1984-86 state budget, as passed by the 1984 General Assembly, were unconstitutional. The Attorney General's Opinion prompted a number of questions about the legality of House Bill 474 and Senate Bill 294, companion legislation to the appropriations act, concerning the relationship of the budget to the Kentucky Revised Statutes, and raised several areas of concern. Among these were:

- Part VIII of House Bill 474. This new section of the budget bill was included for budget balancing purposes by the 1984 General Assembly. It authorized the transfer of over $11 million from a wide variety of restricted revenue funds and special funds into the General Fund, under a central administrative expense assessment concept.
- Various sections of Part II of House Bill 474. Portions of Part II authorized the transfer of almost $6 million of agency funds as non-revenue receipts credited to the General Fund.
- The use of "Notwithstanding the Provisions of KRS" language in both House Bill 474 and Senate Bill 294. According to the Opinion, "the State Budget Bill, containing language which is designed to amend, modify or suspend existing statutory law, is unconstitutional."

Although the full financial impact of this final objection is not precisely known, it could be tremendously significant if the Opinion were to be accepted as correct or broadly interpreted by a court. For example, a court could rule that the Commonwealth must fully fund the annual 5 percent salary adjustment for all state employees pursuant to KRS 18A.355. This item alone could cost an additional $25 million over the biennium beyond what is currently provided for in the budget.

Of course, the fiscal implications of the Attorney General's complaint are limited to the 1984-86 biennium. Possibly more important are the long-range policy implications and constraints implicit in his legal challenge. Both the Executive, in proposing a budget, and the Legislature, in enacting a budget, have traditionally expressed far-reaching policy decisions as part of the "omnibus appropriations bill" approach to the budget for the Executive Branch. These expressions are often delineated in "language appropriations" that identify program priorities, constrain agency action, or suspend conflicting statutes in order to balance the budget or accentuate important policy choices of the Governor and/or General Assembly.

If the current legal challenge sets aside this long-standing practice, the political task of enacting a balanced budget would be made significantly more difficult for the Legislature by forcing tough, on-the-record decisions at multiple points in the appropriations process. Although such a prospect may be superficially appealing, its pragmatic complications are potentially enormous for Kentucky's historic unified budget.

Most recently, on June 6, 1984, the Attorney General filed suit over the budget in Franklin Circuit Court, seeking a declaratory judgment. At this writing, this suit is still pending. The items at issue were identical to those matters addressed in his Opinion of May 17; the suit names the Governor, the Secretary of the Finance and Administration Cabinet, and the state Treasurer as defendants.

Conclusion

What was learned from the 1984-86 state budget process? Foremost is the notion that the budget process in Kentucky is rapidly changing. It is no longer basically a static bureaucratic process, financed with an adequate revenue stream, and politically controlled by the Governor. The world turns; realities change. Today there is a totally different state budget situation than existed just ten years ago and the 1984-86 budget process seems in many ways to have accelerated the on-going process of change. Among the most notable features of this new environment which seem to be becoming more dominant in state budgeting in Kentucky are the following:

- the inadequacy and uncertainty of the Commonwealth's revenue structure;

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A Preliminary Look at Developmental Progress in Rural Kentucky, 1960-80

by Cynthia L. Duncan*

Chronic poverty has plagued rural Kentucky[1] since the turn of the century, especially counties in which residents depend upon small farms or coal mining for their livelihoods.[2] State and federal policy makers have taken a variety of steps to promote economic growth in these areas. The premise has been that increased income and employment would reduce poverty and improve socio-economic conditions. When the Appalachian Regional Commission (ARC) was established in the late 1960s to address the problems of persistent poverty in Appalachia, its strategy was to use public investments to induce economic growth, with the explicit assumption that "economic growth . . . would lead to more general development."[3]

Experience in this country and abroad demonstrates that economic growth does not guarantee economic development. Growth has occurred in numerous countries without reducing poverty or improving the standard of living of most residents. In describing the establishment of the ARC, Newman noted that the belief that economic growth would lead to development was "far more readily accepted in the early 1960s than a decade later."[4] By the 1970s, scholars as well as development agencies acknowledged that the *distribution* of the benefits of economic growth is the fundamental factor determining whether increased economic activity has developmental impact. The benefits of economic growth can be concentrated within a small sector of the population, with little benefit reaching low income families. Poverty and depressed conditions can persist even when there is remarkable economic growth.[5]

This perspective on development is relevant in analyzing progress in the rural Kentucky counties which have had persistent poverty because rural Kentucky has experienced two decades of expanding economic activity. Most rural Kentucky counties depend heavily on a single sector of the economy, and some sectors grew much faster than others between 1960 and 1980. These economic changes will be examined against the background of the different economic bases which dominate counties in order to analyze whether economic growth has brought developmental progress in Kentucky.

Rural Kentucky has moved away from dependence upon agriculture, and has become more dependent upon manufacturing and mining income.[6] As shown in Table 1, agriculture provided 9.2 percent of total earned income in Kentucky in 1959, and 18.3 percent in rural counties; by 1980, agriculture contributed only 3.9 percent of earned income for Kentucky as a whole, and only 5.6 percent for the rural counties. Mining income as a proportion of earned income grew for Kentucky as a whole from 1959 to 1980, but growth was more dramatic in the rural counties where it contributed 17 percent of earned income in 1980, up from 10.6 percent in 1959. Most of this growth was in the 1970s. The relative importance of manufacturing grew from 23.5 percent to 25.7 percent for all of Kentucky over this period, but the change in dependence upon manufacturing income grew to a greater degree in rural Kentucky—from 13.1 percent in 1959 to 20.1 percent in 1980. Most of that increase occurred in the decade of the 1960s when rural industrialization was in full swing nationwide.[7] Income from employment in government and non-government services remained steady as a proportion of total earned income in rural Kentucky over the twenty year period, but it contributed slightly less as a percentage for Kentucky as a whole in 1980 than in 1959.

TABLE 1

DISTRIBUTION OF TOTAL LABOR AND PROPRIETORS' INCOME

	1959		1970		1980	
Industry	All Kentucky	Rural Kentucky	All Kentucky	Rural Kentucky	All Kentucky	Rural Kentucky
Agriculture	9.2%	18.3%	5.5%	10.5%	3.9%	5.6%
Mining	4.9	10.6	4.3	9.8	7.7	17.0
Coal Mining	3.9	NA	3.8	NA	7.1	NA
Construction	5.3	5.5	6.8	6.2	5.9	5.4
Manufacturing	23.5	13.1	25.7	18.0	25.7	20.1
Government	14.9	18.1	18.1	21.4	16.4	18.2
Non-government Services	41.0	33.7	39.5	32.5	40.0	33.7

SOURCE: Bureau of Economic Analysis (BEA), U.S. Department of Commerce, through the Kentucky Economic Information System (KEIS).

For purposes of this analysis, indicators of economic conditions and growth include per capita personal income and median family money income. Social conditions and developmental changes are represented by the proportion of families who are low income, the percent of the adult population with a high school education, and the proportion of housing units with complete plumbing facilities.[8] These indicators are not comprehensive, but they permit an initial assessment of the relationship between economic growth and economic development in rural Kentucky.

Counties are categorized as FARM, COAL, MANUFACTURING, or GOVERNMENT-MIXED INDUSTRY, according to the dominant source of labor and proprietors' income in the county in 1980. The criteria and categorization are described in the Appendix. The distribution of these counties by economic base is shown in Figure 1, and the counties are listed by economic base in the Appendix.

Overall Improvement in Rural Kentucky

Economic and social conditions in rural Kentucky counties have lagged behind the nation for decades, but in most respects the gap has narrowed in the last twenty years. In 1959 per capita personal income in rural Kentucky was 51 percent of the national average, but by 1980 it had risen to 64 percent. Median family money income, which was 49 percent of the national level in 1959, had risen to 69 percent in 1979.

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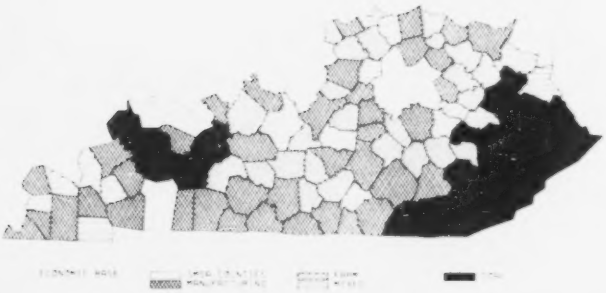
Figure 1

ECONOMIC BASE IN NONMETROPOLITAN KENTUCKY COUNTIES, 1980



The gap in median family money income has narrowed on a constant dollar basis as well as on a percentage basis; the gap in per capita personal income actually widened on a constant dollar basis.[9]

These income changes were reflected in a general decrease in the poverty rate. Low income families made up about 54 percent of all families in rural Kentucky counties in 1959, two and one half times the proportion in the nation, and almost one and one half that in the state. By 1979, 27 percent of all families in rural Kentucky were in a low income category, compared to 14 percent nationwide and 20 percent in the state as a whole.

Progress in housing conditions was dramatic. Only 33 percent of the houses in rural Kentucky had complete plumbing in 1960, compared to 86 percent in 1980. While rural Kentucky counties had only a third as many plumbed housing units as the nation in 1960, by 1980 rural Kentucky had reached 87 percent of the national figure.

In education, Kentucky has not narrowed the gap; it ranks 50th in the nation in adult educational attainment. However, there has been improvement within the state. In 1960 only 20 percent of rural Kentucky adults had completed high school, less than half the national figure, but in 1980, 43 percent had completed high school, representing close to two-thirds of the national figure. Table 2 presents data on economic and social conditions in Kentucky nonmetropolitan counties, Kentucky and the nation.

A Comparison of Economic and Social Conditions According to Economic Base in 1979/1980

Economic conditions can be measured in a variety of ways, depending upon the research questions. The purpose here is to analyze the extent to which economic growth has resulted in economic development in rural Kentucky counties, and to assess whether that relationship varies by economic base. Increases in income are among the most accessible measures of economic growth at the county level. Two different income measures for the counties are compared here: per capita personal income and median family money income. Personal income includes current income received by persons from all sources, and takes into account unearned income, including transfer payments, nonmonetary and all imputed types of income. Money income includes total money income received by all persons 15 years and older in a family as reported on the decennial Census questionnaire. It should include all amounts received from wages and salaries, interest and dividends and public assistance, etc., but its accuracy depends upon the respondents' recollections and reporting. It does not include nonmonetary or imputed income.

Per capita personal income is an arithmetic mean, derived by taking all the personal income of residents in a county, and dividing by the county population. Among descriptive measures of income it has the advantage of using all sources of income. However, mean values are influenced by extreme scores in either direction, so that one very high score or one very low score can pull the mean up or down. For instance, the per capita personal income figure would be the same whether a million dollar increase in income was concentrated among a relatively few people or was spread evenly among

(continued on page 12)

TABLE 2

COMPARISON OF CHANGE IN ECONOMIC AND SOCIAL INDICATORS IN NONMETROPOLITAN KENTUCKY, KENTUCKY, AND THE U.S., 1959/60 (T_1) to 1979/80 (T_2)

Social Indicator	Nonmetropolitan Kentucky Counties			Kentucky			United States		
	T_2(a)	T_1(b)	Change	T_2(a)	T_1(b)	Change	T_2(a)	T_1(b)	Change
Per Capita Personal Income in Current Dollars	$6,054	$1,108		$7,567	$1,563		$9,483	$2,160	
Per Capita Personal Income in Constant 1972 Dollars	$3,382	$1,569	115.6%	$4,227	$2,214	90.9%	$5,298	$3,059	73.2%
Median Family Money Income in Current Dollars	$13,685	$2,794		$16,399	$4,051		$19,908	$5,660	
Median Family Money Income in Constant 1972 Dollars	$8,422	$3,957	112.8%	$10,091	$5,738	75.9%	$12,251	$8,017	52.8%
Low Income Families (Percent of Total)	27%	54%	-27pts.	20%	38%	-18pts.	14%	21%	-7pts.
Education: Percent Adults 25 Years and Older with High School Education	43%	20%	23pts.	53%	28%	25pts.	67%	41%	26pts.
Percent Housing Units with Complete Plumbing	86%	33%	53pts.	92%	62%	30pts.	98%	85%	13pts.

(a) T_2: Time 2 is 1980 for per capita personal income, percent high school graduates, and percent housing units with complete plumbing; 1979 figures for median family money income and percent low income families.

(b) T_1: Time 1 is 1960 for percent high school graduates, and percent housing units with complete plumbing, 1959 figures for per capita personal income, median family money income and percent low income families.

SOURCE: See Note 8.

selected indicators OF ECONOMIC A

These tables of selected indicators of economic activity were prepared by a special-purpose program of the Kentucky Economic Information System. The data in the tables are reported figures which were obtained from a variety of state and federal agencies, as well as from private firms.

UNITED STATES DATA

	Jan. 1984	Feb. 1984	March 1984	Qtr. I 1984	% Chg. 83-IV 84-I	% Chg. 83-I 84-I	
CONSUMER PRICE INDEXES (1967=100, NOT SEASONALLY ADJUSTED)							
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, ALL ITEMS (NEW DEF)	305.20	306.60	307.30	306.37	1.09	4.48	
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, FOOD AND BEVERAGES	291.60	294.20	294.30	293.37	2.64	4.09	
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, HOUSING (INCL RENTAL EQUIV)	329.20	331.00	331.50	330.57	1.07	3.84	
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, APPAREL AND UPKEEP	196.40	196.20	198.80	197.13	-1.55	2.41	
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, TRANSPORTATION	306.00	305.80	306.90	306.23	0.12	5.56	10
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, MEDICAL	369.50	373.20	374.50	372.40	2.12	6.26	16
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, ENTERTAINMENT	249.90	251.50	251.70	251.03	0.67	3.28	19
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, OTHER	300.50	301.50	302.10	301.37	1.19	7.20	19
CONSUMER PRICE INDEX, ALL URBAN CONSUMERS, SPECIAL INDEX: ENERGY	416.70	420.20	418.10	418.33	-0.63	2.78	0
							3
PRODUCER PRICE INDEXES (1967=100, NOT SEASONALLY ADJUSTED)							0
PRODUCER PRICE INDEX, ALL COMMODITIES	308.10	308.80	311.10	309.33	1.13	2.95	4
PRODUCER PRICE INDEX, ALL FINISHED GOODS	289.40	290.60	291.70	290.57	1.17	2.38	1
PRODUCER PRICE INDEX, FINISHED CONSUMER GOODS	288.80	290.10	291.40	290.10	1.29	2.40	
PRODUCER PRICE INDEX, INTERMEDIATE MATERIALS	316.60	317.40	319.50	317.83	0.71	2.68	
PRODUCER PRICE INDEX, INTERMEDIATE MATERIALS FOR MANUFACTURING	298.60	299.50	301.70	299.93	1.04	3.44	5
PRODUCER PRICE INDEX, CRUDE MATERIALS	333.70	332.80	339.40	335.30	3.01	5.25	2
PRODUCER PRICE INDEX, CRUDE FOODSTUFFS AND FEEDSTUFFS	264.20	260.70	270.70	265.20	4.48	7.80	9
PRODUCER PRICE INDEX, BITUM. COAL, INDUSTRIAL, SPOT(1967=100)	448.50	437.50	471.00	452.33	2.24	2.30	0
PRODUCER PRICE INDEX, BITUM. COAL, INDUSTRIAL, CONTRACT(JUNE76=100)	151.70	152.90	152.40	152.33	0.15	1.38	5
PRODUCER PRICE INDEX, ALL CONSTRUCTION MATERIALS	302.30	304.80	306.40	304.50	0.02	3.82	1
							0
CONSUMER PRICES: ENERGY (U.S. CITY AVERAGE)							0
AVG PRICE FOR UTILITY (PIPED) GAS, PER 40 THERMS	26.90	27.11	27.15	27.05	-0.49	3.48	
AVG PRICE FOR UTILITY (PIPED) GAS, PER 100 THERMS	61.56	61.80	61.88	61.75	-1.98	2.80	
AVG PRICE FOR ELECTRICITY, PER 500 KWH	38.59	38.83	39.07	38.83	1.04	4.12	
AVG PRICE FOR FUEL OIL #2 (HOME HEATING OIL), PER GALLON	1.12	1.22	1.16	1.17	7.36	1.30	19
AVG PRICE, GASOLINE, ALL TYPES, PER GALLON	1.20	1.19	1.19	1.20	-2.47	1.96	23
AVG PRICE, GASOLINE, LEADED REGULAR, PER GALLON	1.13	1.13	1.13	1.13	-2.68	2.18	28
AVG PRICE, GASOLINE, UNLEADED REGULAR, PER GALLON	1.22	1.21	1.21	1.21	-2.47	1.93	33
AVG PRICE, GASOLINE, LEADED PREMIUM, PER GALLON	1.37	1.36	1.36	1.36	-1.52	1.74	31
							12
LABOR FORCE (SEASONALLY ADJUSTED, MILLIONS OF PERSONS)							28
LABOR FORCE, TOTAL (INCL RES ARMED FORCES)	113.90	114.38	114.60	114.29	0.53	1.87	35
LABOR FORCE, CIVILIAN (EXCL RES ARMED FORCES)	112.21	112.69	112.91	112.61	0.53	1.72	
EMPLOYMENT, RESIDENT ARMED FORCES	1.69	1.68	1.69	1.69	-0.24	1.22	
EMPLOYMENT, TOTAL CIVILIAN	103.19	103.89	104.14	103.74	1.20	4.56	23
EMPLOYMENT, AGRICULTURE	3.27	3.39	3.28	3.32	0.95	-2.68	04
EMPLOYMENT, NONAGRICULTURAL	99.92	100.50	100.86	100.42	1.21	4.82	57
UNEMPLOYED, CIVILIAN, TOTAL	9.03	8.80	8.77	8.87	-6.74	-22.81	05
UNEMPLOYMENT RATE, TOTAL LABOR FORCE	7.90	7.70	7.70	7.76	-7.23	-24.22	93
UNEMPLOYMENT RATE, CIVILIAN LABOR FORCE	8.04	7.81	7.77	7.87	-7.23	-24.11	37
OTHER SELECTED NATIONAL INDICATORS:							
U.S. GROSS NATIONAL PRODUCT (B $) (% CHG, ANNUAL RATE)	NA	NA	NA	3550.10	13.93	11.94	94
U.S. REAL GROSS NATIONAL PRODUCT (B 72$) (% CHG, ANNUAL RATE)	NA	NA	NA	1609.30	9.70	8.00	58
PERSONAL INCOME, TOTAL, SEASONALLY ADJUSTED (B $)(% CHG, ANNUAL RATE)	2906.80	2928.00	2943.70	2926.20	13.50	10.10	23
COMPOSITE INDEX OF 12 LEADING INDICATORS (1967=100)	164.70	167.00	167.40	166.37	1.90	12.71	34
INDEX OF INDUSTRIAL PRODUCTION, SEASONALLY ADJUSTED (1967=100)	158.50	160.00	160.80	159.77	2.74	15.35	72
AVERAGE PRIME RATE CHARGED BY BANKS ON SHORT-TERM BUSINESS LOANS	11.00	11.00	11.21	11.07	0.64	1.75	66
INTEREST RATE, YIELD ON 3-MONTH TREASURY BILLS	8.93	9.03	9.44	9.13	3.87	13.02	85
PRIVATE HOUSING UNITS AUTH. 16000 PERMIT-ISSUING PLACES (SADJ THOU)	1817.00	1946.00	1713.00	1825.33	65.35	24.65	37
TOTAL INSTALLMENT CREDIT OUTSTANDING AT END OF MONTH (B $)	394.92	399.18	402.47	402.47	1.61	14.42	

ACTIVITY

KENTUCKY DATA

	Jan. 1984	Feb. 1984	March 1984	Qtr. I 1984	% Chg. 83-IV 84-I	% Chg. 83-I 84-I
LABOR FORCE (NOT SEASONALLY ADJUSTED, THOUSANDS)						
LABOR FORCE, TOTAL CIVILIAN	1723.40	1717.00	1723.40	1721.27	1.54	2.06
EMPLOYMENT, TOTAL, BY PLACE OF RESIDENCE	1525.00	1530.50	1549.40	1534.97	-0.13	5.90
EMPLOYMENT, AGRICULTURAL	45.10	47.80	52.60	48.50	-31.27	-2.41
EMPLOYMENT, TOTAL NON-AGRICULTURAL	1479.90	1482.70	1496.80	1486.47	1.37	6.19
UNEMPLOYMENT RATE	11.50	10.90	10.10	10.82	15.89	-23.02
EMPLOYMENT, TOTAL NON-AGRICULTURAL WAGE AND SALARY	1158.90	1158.90	1166.40	1161.40	-1.48	2.85
EMPLOYMENT, BITUMINOUS COAL & LIGNITE MINING (SIC 12)	35.80	35.40	35.90	35.70	0.66	-5.14
EMPLOYMENT, CONTRACT CONSTRUCTION	44.70	45.50	47.60	45.93	-9.22	12.31
EMPLOYMENT, TOTAL MANUFACTURING	249.00	249.40	252.00	250.13	2.07	6.42
EMPLOYMENT, MANUFACTURING, DURABLE	135.10	136.10	138.00	136.40	3.10	11.59
EMPLOYMENT, MANUFACTURING, NON-DURABLE	113.90	113.30	114.00	113.73	0.86	0.83
EMPLOYMENT, TRANSPORTATION, COMMUNICATIONS & PUBLIC UTILITIES	60.60	62.60	62.60	61.93	-4.03	1.47
EMPLOYMENT, WHOLESALE & RETAIL TRADE	269.30	264.10	263.70	265.70	-3.73	4.76
EMPLOYMENT, FINANCE, INSURANCE & REAL ESTATE (SIC 60-67)	53.30	52.90	53.00	53.07	-0.06	2.18
EMPLOYMENT, SERVICES (SIC 70-80)	221.80	222.10	224.40	222.77	-0.64	2.03
EMPLOYMENT, CIVILIAN GOVERNMENT	219.50	221.70	221.90	221.03	-1.44	-1.95
EMPLOYMENT, STATE & LOCAL GOVERNMENT	179.10	181.30	181.50	180.63	-1.49	-2.52
HOURS AND EARNINGS OF PRODUCTION WORKERS IN MANUFACTURING						
AVG WEEKLY HOURS, PROD WORKERS, TOTAL MANUFACTURING	39.20	39.00	39.10	39.10	-1.59	0.60
AVG WEEKLY HOURS, PROD WORKERS, MANUFACTURING DURABLES	40.30	40.40	40.10	40.27	-0.33	4.59
AVG WEEKLY HOURS, PROD WORKERS, NON-DURABLE MANUFACTURING	37.90	37.50	37.90	37.77	-3.00	-3.66
AVG HOURLY EARN, PROD WORKERS, TOTAL MANUFACTURING	9.17	9.16	9.16	9.16	0.88	6.88
AVG HOURLY EARN, PROD WORKERS, MANUFACTURING DURABLES	9.84	9.83	9.87	9.85	1.83	5.71
AVG HOURLY EARN, PROD WORKERS, NON-DURABLE MANUFACTURING	8.33	8.32	8.27	8.31	0.00	7.46
AVG WEEKLY EARN, PROD WORKERS, TOTAL MANUFACTURING	359.46	357.24	358.16	358.29	-0.73	7.52
AVG WEEKLY EARN, PROD WORKERS, MANUFACTURING DURABLES	396.55	397.13	395.79	396.49	1.48	10.58
AVG WEEKLY EARN, PROD WORKERS, NON-DURABLE MANUFACTURING	315.71	312.00	313.43	313.71	-2.98	3.54
MINING (MILLIONS OF TONS, MILLIONS OF TAX DOLLARS)						
BITUMINOUS COAL & LIGNITE, PHYSICAL OUTPUT, EASTERN KY, TOTAL	8.66	9.28	10.66	28.60	10.73	25.54
BITUMINOUS COAL & LIGNITE, PHYSICAL OUTPUT, WESTERN KY, TOTAL	3.50	3.73	3.91	11.15	12.31	19.28
AVG HOURLY EARN, PROD WORKERS, BITUMINOUS COAL & LIGNITE MINING	13.70	13.93	14.23	13.95	-1.25	-6.23
AVG WEEKLY EARN, PROD WORKERS, BITUMINOUS COAL & LIGNITE MINING	511.01	509.84	516.55	512.47	6.62	3.04
AVG WEEKLY HOURS, PROD WORKERS, BITUMINOUS COAL & LIGNITE MINING	37.30	36.60	36.30	36.73	7.93	9.98
TAX RECEIPTS, COAL SEVERANCE, CONSOLIDATED, TOTAL	14.28	14.98	18.36	47.63	*	7.20
HOUSING (MILLIONS OF $, NO. OF PRIVATE RESID. UNITS--NOT SEAS ADJ)						
VALUE OF CONSTRUCTION CONTRACTS, RESIDENTIAL & NON-RES	113.20	106.30	187.60	407.10	-19.72	4.12
HOUSING UNITS, PRIVATE STRUCTURES, PERMIT AUTHORIZED, 1 UNIT	237.00	426.00	721.00	1384.00	17.59	30.20
VALUATION, HOUSING UNITS, PRIVATE STRUCTURES, PERMIT AUTH, 1 UNIT	13.09	21.96	35.76	70.81	25.59	45.28
HOUSING UNITS, PRIVATE STRUCTURES, PERMIT AUTHORIZED, TOTAL	570.00	895.00	1590.00	3055.00	49.24	42.56
VALUATION, HOUSING UNITS, PRIVATE STRUCTURES, PERMIT AUTH, TOTAL	18.89	36.85	49.44	105.18	40.24	51.73
NET LOANS MADE & ACQUIRED BY KY. SAVINGS & LOAN ASSOCIATIONS	22.05	36.33	74.39	132.77	-13.16	116.67
RETAIL SALES (MIL $, 000 CARS)						
TAX RECEIPTS, GENERAL FUND, SALES AND GROSS RECEIPTS	86.54	63.08	71.00	220.62	*	8.58
NEW PASSENGER CAR REGISTRATIONS, TOTAL, NOT SEAS. ADJ.	8.64	8.72	9.42	26.78	*	24.51
SELECTED STATE GOVERNMENT RECEIPTS (MIL $)						
TAX AND NONTAX RECEIPTS, GENERAL FUND, TOTAL	256.71	179.88	147.31	583.90	*	8.70
TAX RECEIPTS, GENERAL FUND, SALES & USE TAXES, TOTAL	80.35	53.28	54.88	188.51	*	9.05
TAX RECEIPTS, GENERAL FUND, INCOME TAX, INDIVIDUAL	65.40	69.08	24.89	159.37	*	12.24
TAX RECEIPTS, GENERAL FUND, INCOME TAX, CORPORATION	5.56	5.38	9.66	20.60	*	-10.09
TAX RECEIPTS, STATE ROAD FUND, STATE SHARE	33.12	36.29	35.65	105.05	*	2.35
TAX RECEIPTS, STATE ROAD FUND, MOTOR FUELS TAXES, NORMAL	16.38	13.75	15.28	45.42	*	1.46
TAX RECEIPTS, STATE ROAD FUND, MOTOR VEHICLE USAGE TAX	9.62	11.08	12.28	32.98	*	23.72

PRIVATE SOURCES FOR THE ABOVE DATA INCLUDE:
F. W. DODGE DIVISION (MCGRAW-HILL INFORMATION SYSTEMS COMPANY), VALUE OF CONSTRUCTION CONTRACTS;
R. L. POLK & COMPANY, NEW CAR REGISTRATIONS (NA FOR OCT. '83)

NOTE: THE DATA ON PERMIT-AUTHORIZED CONSTRUCTION COME FROM THE BUREAU OF THE CENSUS, U.S. DEPARTMENT OF COMMERCE AND REPRESENT THE KENTUCKY PORTION OF THE NATIONAL SURVEY OF 16,000 PERMIT-ISSUING PLACES.

* = QUARTER TO QUARTER COMPARISONS NOT MEANINGFUL DUE TO SEASONAL VARIATION

(continued from page 9)

residents in a county. Since income is usually skewed in its distribution, median income measures are frequently reported in conjunction with mean incomes.

Median family money income is the middle money income level for all the families in a county and does not include money income of unrelated persons in non-family households. Half the families report more than this amount and half report less. Therefore, it is a descriptive measure which is not as influenced by changes concentrated among those with extremely low or high levels of income. If a million dollar increase in income were concentrated among a few people, median family income would not change because the half-way point, based upon the number of families rather than on levels of income, would still be the same. However, if that same million dollars were spread widely among residents, median family income would increase. Thus growth measured using per capita personal income illustrates aggregate increases in total income in counties regardless of how broadly they are distributed among families, and median family income gives some indication of how broadly those increases were shared. It is also important to bear in mind that not only is one income measure a mean and the other a median; the definition of "income" and the measurement (person and family) differ as described.

Per capita personal income in 1980 in rural Kentucky counties was $6,054, but the figures ranged from $3,827 in Owsley County to $9,486 in Franklin County. Median family income was $13,685 overall in rural Kentucky, ranging from $7,170 in Owsley to $19,923 in Franklin. On both measures the differences between economic bases are significant, both substantively and statistically.[10]

As Table 3 shows, income was lowest in counties dependent upon agriculture, at a per capita personal income level of $5,328 in 1980. In coal counties it was 15.1 percent higher, at $6,133. Manufacturing counties were 20 percent higher, with $6,389. The ranking is the same using median family money income, but in this case coal county income was only 6.4 percent higher than farm county income, while it was still 18.3 percent higher in manufacturing counties. The fact that coal counties are closer to the other non-agricultural based counties on per capita personal income than they are on median family money income suggests that income is less evenly distributed among residents in coal counties.

This skewed income distribution in coal counties is also reflected in the proportion of low income families. Poverty measures are notoriously difficult for analysts to use accurately because the condition of poverty is not uniformly captured by an arbitrary cut-off in income levels. While some researchers have developed constructive measures which better tap the depth and complexity of the concept, these are not readily applicable to Census data available for counties.[11] Even though coal counties have higher income levels overall than farm based counties, both groups have 30 percent low income families. Manufacturing and government-mixed counties have smaller proportions, with 24 and 25 percent respectively.

The proportion of adults with a high school education in rural Kentucky is low by any standard. The 1980 figure ranged from 25 percent in Jackson County to 67 percent in Hardin. In farm counties only 39 percent of the adults had completed high school; in coal counties only 38 percent had. Thus in 1980 the proportion of adults who are high school graduates in the farming and coal counties is *lower* than the national figure was twenty years earlier. The average for all Kentucky nonmetropolitan counties was raised by the manufacturing and government-mixed industry counties, which had 46 and 48 percent respectively.

TABLE 3

COMPARISON OF CHANGE IN ECONOMIC AND SOCIAL INDICATORS IN RURAL KENTUCKY 1959/60 (T_1) to 1979/80 (T_2)

Social Indicator	Farm Counties (a) (N = 23)			Coal Counties (a) (N = 24)			Manufacturing Counties (a) (N = 39)			Government/ Mixed Counties (a) (N = 17)		
	T_2(b)	T_1(c)	Change	T_2(b)	T_1(c)	Change	T_2(b)	T_1(c)	Change	T_2(b)	T_1(c)	Change
Per Capita Personal Income in Current Dollars	$5,328	$1,035		$6,133	$896		$6,389	$1,245		$6,159	$1,190	
Per Capita Personal Income in Constant 1972 Dollars	$2,976	$1,466	103.0%	$3,426	$1,269	170.0%	$3,569	$1,763	102.4%	$3,441	$1,686	104.1%
Median Family Money Income in Current Dollars	$12,299	$2,513		$13,080	$2,417		$14,546	$3,038		$14,443	$3,147	
Median Family Money Income in Constant 1972 Dollars	$7,569	$3,559	112.6%	$8,049	$3,423	135.1%	$8,951	$4,303	108.0%	$8,888	$4,457	99.4%
Low Income Families (Percent of Total)	30%	58%	-28pts.	30%	60%	-30pts.	24%	51%	-27pts.	25%	49%	-24pts.
Education: Percent Adults 25 Years and Older with High School Education	39%	17%	22pts.	38%	16%	22pts.	46%	23%	23pts.	48%	22%	26pts.
Percent Housing Units with Complete Plumbing	81%	26%	54pts.	83%	28%	55pts.	89%	39%	50pts.	89%	38%	51pts.
Net Migration Rate 1970-80	9%			15%			11%			14%		
Percent Housing Units that are Mobile Homes, 1980	10%			15%			9%			13%		

(a) Economic base criteria are described in the Appendix.
(b) T_2: Time 2 is 1980 for per capita personal income, percent high school graduates, and percent housing units with complete plumbing; 1979 figures for median family money income and percent low income families.
(c) T_1: Time 1 is 1960 for percent high school graduates, and percent housing units with complete plumbing; 1959 figures for per capita personal income, median family money income and percent low income families.
SOURCE: See Note 8. Source for net migration rate and percent of housing units that are mobile homes is the 1980 Census, Summary Tape File 3.

About 86 percent of the housing units in rural Kentucky had complete plumbing facilities in 1980, ranging from 65 percent in Owsley County to 98 percent in McCracken. The differences between economic bases were not quite as dramatic as the differences in education and in low-income families, but are nonetheless statistically significant. Only 81 percent of the housing units in agricultural counties, and only 83 percent in coal counties, were equipped with complete plumbing. Manufacturing and the government-mixed counties both had 89 percent of the housing units with complete plumbing.

These observations suggest that coal counties have more in common with farm counties, which have suffered from stagnating economic activity, than they do with manufacturing or government-mixed counties. But this 1980 snapshot may be sharpened by examining changes over the last twenty years.

Changes in Social and Economic Conditions

When looking at the income levels and selected indicators of social conditions in rural Kentucky in 1980, coal and farm counties consistently lag behind counties in which manufacturing or government or a mixed industrial base dominate the economy. But conditions in farming and coal counties were even worse in 1960. Do their conditions in 1980 represent significant improvement? Has the seventies boom in the coal industry been translated into improved social and economic conditions in 1980?

Using constant 1972 dollars (i.e., controlling for inflation) we can compare conditions and changes in income levels between 1959 and 1980 (see Table 3). In 1959 per capita personal income in Kentucky's rural counties averaged $1,569, and ranged from a low of $766 in Martin County to a high of $2,644 in Franklin County. Compared to coal counties, which had an average per capita personal income of $1,269, farming counties were better off, with an average of $1,466. Four out of the five poorest counties were eastern coal counties (Martin, Magoffin, McCreary and Knott), and one was a farming county (Menifee). The manufacturing and government-mixed counties ranked highest in that decade as well, with average per capita incomes of $1,763 and $1,686.

Growth in per capita personal income between 1959 and 1980 varied widely according to economic base. The average change in nonmetropolitan Kentucky counties was 116 percent. Coal counties had a remarkable growth of 170 percent, while manufacturing counties grew only 102 percent, farming 103 percent, and the government-mixed counties 104 percent. Three of the biggest growth counties were western coal counties: Webster, Hopkins and Muhlenberg.

TABLE 4
CHANGE IN PER CAPITA PERSONAL INCOME RANK: RURAL KENTUCKY, 1959-80

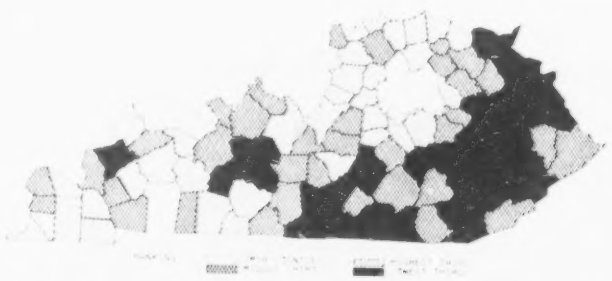
		Improved Ranking		Same Ranking		Lower Ranking	
Economic Base	N	N	%	N	%	N	%
Farm Counties	23	0	0	18	25	5	29
Coal Counties	24	9	60	15	21	0	0
Manufacturing Counties	39	4	27	29	41	6	35
Govt.-Mixed Counties	17	2	13	9	13	6	35
Total	103	15	100	71	100	17	99

SOURCE: Bureau of Economic Analysis (BEA), U.S. Department of Commerce, through the Kentucky Economic Information System (KEIS).

When the rural Kentucky counties are separated into three groups according to whether they improved, stayed the same, or declined in their relative ranking on per capita personal income, as in Table 4, the distribution of these changes across economic base categories can be evaluated. Figures 2 and 3 shade the counties according to whether they ranked in the top, middle, or lower third of all rural Kentucky counties on the basis of per capita personal income in 1959 and 1980. As shown, 15 counties improved their rankings (approximately 15 percent), while the majority—71—remained relatively the same; 17 (approximately 17 percent) declined in this sense. While none of the farm-base counties improved, 9 of the coal counties did (38 percent of all coal counties). Four manufacturing counties (10 percent of all manufacturing counties) and 2 government-mixed counties (12 percent of this group) improved. Sixty percent of all the counties that experienced relative improvement were coal based.

Figure 2

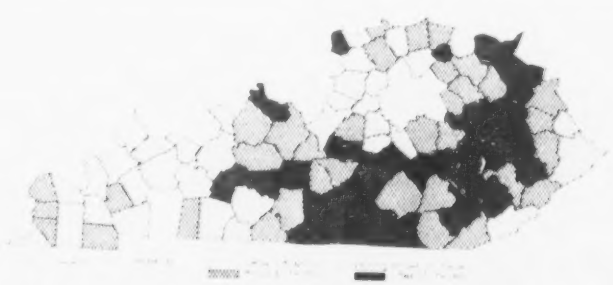
PER CAPITA PERSONAL INCOME RANKINGS, 1959



Three-fourths of the farming counties maintained the same ranking over the twenty-year period, two-thirds of the coal counties stayed the same, three-fourths of the manufacturing counties stayed in the same ranking, and about half the government-mixed industry counties stayed the same. None of the coal counties declined in ranking, but 22 percent of the farm counties (5 counties) declined; 15 percent of the manufacturing counties (6 counties), and 35 percent of the government-mixed counties (6 counties) declined.

Figure 3

PER CAPITA PERSONAL INCOME RANKINGS, 1980



Referring again to Table 3, median family money income in 1959, measured in constant dollars, was $3,957 in the rural counties, but farm counties only had $3,559 and coal counties $3,423, compared to $4,303 in manufacturing counties, and $4,457 in government-mixed industry counties. The big-

gest change over the twenty-year period occurred in coal counties, with an average improvement of 135 percent, compared to 113 percent in farming counties, 108 percent in manufacturing counties, and 99 percent in government-mixed industry counties. Again, the differences between per capita personal income and median family money income are important. While improvements in median family money income were proportionate to improvements in per capita personal income in farming, manufacturing and government-mixed counties, that was not the case in coal counties. Per capita personal income in coal counties increased 170 percent (in constant dollars), but median family income increased only 135 percent. These differences suggest that some of the increase in income was not widely distributed.

In 1959 the proportion of low income families in rural Kentucky counties ranged widely from 22 percent in Franklin County to 81 percent in Wolfe and Owsley counties. There are significant differences between the averages in the four economic base categories: 58 percent of the families in farming counties had low incomes, compared to 60 percent in coal counties, 51 percent in manufacturing counties, and 49 percent in government-mixed counties.

It is interesting that the changes in the proportion of low income families between 1959 and 1979 were within a few points of each other across the different bases, even though the change in per capita personal income was so much greater in coal counties. All of these patterns suggest that the benefits of economic growth in coal counties were concentrated in a small sector of the population rather than broadly distributed. However, these differences could mean that the patterns described thus far reflect increases in non-wage or non-monetary forms of income for residents of coal counties. A number of statistics suggest that coal county income growth was in wages.

First, the percent of total personal income that is from transfer payments rose more in farm, manufacturing and government-mixed base counties than it did in coal counties. Second, the percent of all income that is from earnings of labor and proprietors declined throughout rural Kentucky but declined more in farm, manufacturing and government-mixed counties than it did in coal counties, 1959-80. Finally, the 1980 average earnings per worker in coal counties were $14,725, compared to $10,389 in government-mixed rural counties, $9,968 in manufacturing rural counties, and $7,173 in farm counties. These figures support the hypothesis that the increase in per capita personal income in coal counties is the result of increases in earned income rather than increases in other forms of income.[12]

As mentioned above, in 1960 the average proportion of high school graduates in nonmetropolitan Kentucky counties was 20 percent, ranging from 9 percent in Jackson and McCreary counties to 47 percent in Meade County. Farming and coal counties lagged behind other rural counties then, with figures of 17 and 16 percent, compared to manufacturing and government-mixed counties' 23 and 22 percent.

Changes in the proportion of residents with a high school education are not as great as changes in the other indicators examined here. In fact, rural Kentucky improved less than the nation did, 1960-80, and so lost ground relatively. Farm and coal counties retained their relative disadvantage compared to counties in the other two sectors. Farm and coal counties had an average increase of 22 percentage points on the education indicator, while manufacturing and government-mixed counties improved an average of 23 and 26 points. The average increase for all the nonmetropolitan counties was 23 points, with the least change occurring in the eastern counties of Magoffin, Cumberland, Morgan, Jackson, and Clay, and the greatest degree of improvement in the western counties of Lyon, Hancock, Trigg, Livingston and Calloway. Although there was some variation among the county groups in net migration rates, the newcomers do not appear to have influenced the overall education levels in the counties very much.

Rural counties in Kentucky have just about caught up with the rest of the nation in the extent to which houses have complete plumbing. Even in 1960, 85 percent of the nation's housing units were equipped with complete plumbing, while in rural Kentucky only 33 percent were. Farming and coal counties had only 26 and 28 percent housing units with plumbing, while manufacturing and government-mixed rural counties had 39 and 38 percent. Farming and coal counties improved the most from 1960-80—those with the least plumbing made greater gains. Farming counties improved 54 percentage points, coal counties an average 55 points. Manufacturing and government-mixed counties were not too far behind, with improvements of 50 and 51 points respectively. Those that improved the most were western counties with the one exception of Martin County. The net migration rate in Martin County between 1970 and 1980 was 33 percent; mobile homes made up 24 percent of the county's housing units in 1980. To some extent the large improvement in Martin County's plumbing situation reflects the influx of mobile homes which come with plumbing.

Conclusion

Economic growth between 1959 and 1980 was greater in rural Kentucky counties than in the nation overall, reflecting the general shift in the national economy to the southern region and to nonmetropolitan areas.[13] The proportion of low-income families dropped by 28 points in rural Kentucky, compared to 7 points nationally, and the proportion of housing units with plumbing increased by 53 points, compared to a change of 13 points in the nation. Rural Kentucky still had almost twice the proportion of low-income families as the U.S. as a whole in 1980, but the gap has decreased. Similarly, the gap between rural Kentucky and the nation has narrowed in the proportion of houses with complete plumbing. Significantly, rural Kentucky has dropped further *behind* the nation in educational attainment, despite the greater income gains.

As shown, conditions vary according to the dominant economic base in the rural counties. Manufacturing base counties and government-mixed industry counties have had higher incomes than the primary industry based farming and coal counties, and these income advantages carried over into better social conditions in 1980. There are proportionally more low-income families in farming and coal counties, relatively fewer adults with a high school education, and relatively fewer

houses with complete plumbing. This scenario fits conventional theories in which secondary and tertiary industries such as manufacturing, trade and services are associated with better economic conditions than the primary production sectors of agriculture and mining.[14]

However, it is the *change* over the last two decades which has important implications for dealing with chronic poverty in Kentucky. Coal counties' income levels grew at a much faster rate than the other types of counties, but social improvements in coal counties did not occur at a much faster pace than in farm counties, even though the farm sector declined relatively over the last twenty years.

Of course, improvements in social conditions require long-term investments of community resources. It is possible that these improvements are underway, and that continued economic growth in coal counties would contribute to further improvements. However, the volatility of the coal industry has made economic development in the coalfields tenuous even when there has been economic growth. Twenty years ago Bowman and Haynes observed that eastern Kentucky coal counties made greater income gains than noncoal counties between 1939 and 1950, but then lost much of that advantage when the postwar decline hit the industry.[15] The data discussed here represent measures of conditions up to 1980; in the three years since, coal production and income have declined. Production in Kentucky was down from 150.1 million tons in 1980 to 136.2 million tons in 1983, and unemployment in the coalfields was as high as 23 percent in some places in the last year. Analysts predict increased demand for Kentucky coal over the long term, but the lack of stability in markets is likely to persist.

Beyond the transitory nature of income gains in coal counties, the unequal distribution of the benefits of economic growth appears to be an obstacle to potential economic development. Coal counties almost caught up with manufacturing counties in per capita personal income, but the fact that median family money income and poverty levels did not improve in tandem suggests that a whole segment of the population in coal counties did not benefit. Poverty persists, and although educational levels have improved in nonmetropolitan Kentucky, the region still lags behind the nation. Evidence from experience in third world countries, as well as in urban areas in the U.S., is that development itself is a process of redistribution. Economic growth must be harnassed deliberately and rechanneled if it is to contribute to reducing poverty and improving the quality of life for all residents.

Among the questions raised by this preliminary look at changes in economic and social conditions in rural Kentucky is whether counties dependent upon a single, volatile, resource-extractive industry can turn their income gains into lasting economic development. It is a critical question for the persistently poor counties in the eastern Kentucky region where the coal industry provides the economic base; but it is also important to the state as a whole. Coal is a vital industry in Kentucky, and the state works hard to promote it in regional, national and international markets. Kentucky policymakers and citizens expect jobs and income in the coal industry to contribute to economic development. If increased jobs and incomes do not automatically result in improved conditions, then we may have to look for policy measures that can make coal activity developmental.

ACKNOWLEDGMENTS

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Notes

[1]"Rural" and "nonmetropolitan" are used interchangeably in the text, but the reference is to nonmetropolitan counties. Although data from three different decades are discussed, the nonmetropolitan status of counties in 1980 is applied for the entire period. That is, a county designated as metropolitan in 1980 by the federal Office of Management and Budget is included as metropolitan in 1960 for the purposes of this analysis. The 17 metropolitan counties in Kentucky in 1980 are Boone, Bourbon, Boyd, Bullitt, Campbell, Christian, Clark, Daviess, Fayette, Greenup, Henderson, Jefferson, Jessamine, Kenton, Oldham, Scott and Woodford. In the maps accompanying this article, the metropolitan counties (i.e., SMSAs) are shown as blank.

[2]See Mary J. Bowman and Warren W. Haynes, *Resources and People in East Kentucky: Problems and Potentials of a Lagging Economy* (Baltimore: The Johns Hopkins Press, 1963), and Thomas F. Davis, *Persistent Low-Income Counties in Nonmetro America*, Rural Development Research Report No. 12 (Washington, D.C.: U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Service, May, 1979).

[3]Monroe Newman, *The Political Economy of Appalachia* (Lexington, Ma.: D.C. Heath & Co., 1972), p. 50. The Kentucky Appalachian region includes 46 nonmetropolitan Kentucky counties which were designated as "Appalachian" by the Appalachian Regional Commission in the late 1960s. These are Adair, Bath, Bell, Breathitt, Carter, Casey, Clay, Clinton, Cumberland, Elliott, Estill, Fleming, Floyd, Garrard, Green, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, McCreary, Madison, Martin, Menifee, Monroe, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Robertson, Rockcastle, Rowan, Russell, Wayne, Whitley, and Wolfe. There are three Kentucky metropolitan counties in the ARC definition of Appalachia.

[4]Newman, *loc. cit.*

[5]James P. Grant, "Development: The End of Trickle-Down?," *Foreign Policy*, No. 12, Fall 1973, pp. 43-65; Hollis Chenery *et al, Redistribution with Growth*, published for the World Bank and the Institute of Development Studies, University of Sussex (London: Oxford University Press, 1974); Robert L. Ayres, *Banking on the Poor: The World Bank and World Poverty* (Cambridge, Ma.: The MIT Press, 1983); Irma Adelman and Cynthia Taft Morris, *Economic Growth and Social Equity in Developing Countries* (Stanford, Ca.: Stanford University Press, 1973); Larry C. Ledebur, *Issues in the Economic Development of Nonmetropolitan U.S.* (Washington, D.C.: Economic Development Administration, 1977).

[6]Personal income statistics are from the Bureau of Economic Analysis, U.S. Department of Commerce (BEA), released in April 1983, and pulled from the Kentucky Economic Information System (KEIS). BEA estimates county-level data for selected years until 1965; after then estimates have been made for each year. BEA statistics for 1959 are definitionally comparable to the 1980 statistics. Some data are not reported for counties in which the sector is so small that data would disclose information about specific businesses. Therefore, the summary statistics used in this analysis are not based on all 103 nonmetropolitan counties at all times. However, nondisclosed data represent such a small portion of any sector or economy that their exclusion is not serious. Total labor and proprietors' income by place of work is a major component of total personal income (a residence-based measure).

[7]Richard Lonsdale and H.L. Seyler (eds.), *Nonmetropolitan Industrialization* (Washington, D.C.: V.H. Winston, 1979).

[8]PER CAPITA PERSONAL INCOME 1980 and 1959 is calculated by the Bureau of Economic Analysis (BEA). Per capita personal income is the total personal income of residents in a county divided by the total population of the county. It includes current income received by persons from all

sources, minus their contributions to social insurance, and *includes* transfer payments, nonmonetary types of income (estimated rental value to owner-occupants of their homes, value of services furnished without payment, and food and fuel produced and consumed on farms), and residence adjustment. The BEA estimates are derived from administrative records, including those from the Unemployment Insurance Program and the Internal Revenue Service.

MEDIAN FAMILY MONEY INCOME for 1979 is taken from Summary Tape File 3 of the 1980 Census of Population and Housing produced by the Bureau of the Census. The 1959 figure is from the *County and City Data Book, 1967*, and originally from the 1960 Census of Population and Housing. The author used a Department of Sociology (University of Kentucky) extract for the 1960 Census data (created by Lawrence Busch, Cornelia Morgan and Carolyn Sachs). Money income includes total money income, as reported on the decennial Census questionnaire, received in calendar year 1979 (or 1959) by all family members 15 years and older. It is tabulated for all families. Total income is the sum of amounts reported separately for income from wages and salaries; nonfarm and farm self-employment; interest, dividends, and net rental; Social Security; public assistance; and all other sources. Family income differs from household income because it excludes income received by household members not related to the householder, persons living alone, and others in nonfamily households. Median family income figures are based on all families, including those with no income.

PERCENT LOW INCOME FAMILIES is a category which refers to families with money incomes less than $3000 in 1959 and less than $7500 in 1979. When the Consumer Price Index is used to control for inflation, $3000 in 1959 dollars is comparable to $7,463 in 1979 dollars. The Bureau of the Census reports the number of families in each county with money incomes below $3000 in 1959 and with incomes below $7500 in 1979. These numbers were used to calculate percentages which are used here as the indicator "low income families," and as a proxy for "poverty."

EDUCATIONAL ATTAINMENT LEVEL is the percent of the adult population 25 years and older completing high school. 1980 data are from the 1980 Census, Summary Tape File 3; 1960 figures are from the *County and City Data Book, 1967*, and were originally reported in the 1960 Census.

HOUSING UNITS WITH COMPLETE PLUMBING is a measure of the proportion of housing units which have complete plumbing facilities for exclusive use. The 1980 figures are from the 1980 Census, Summary Tape File 3; and the 1960 figures are from the *County and City Data Book, 1967*, originally from the 1960 Census.

[9]These different trends suggest that rural Kentucky either has larger families or a larger proportion of poor, unrelated individuals (not included in statistics on families), or both. In 1960 rural Kentucky lagged behind the state as a whole by $645 (per capita, 1972 dollars), and in 1980 that difference increased to $845 (per capita, 1972 dollars). In 1960 rural Kentucky had per capita personal income that was $1490 less than the national level, but in 1980 that gap had increased to $1916 (both in 1972 dollars). See Table 2.

[10]This study analyzes a population rather than a sample, and therefore significance tests are not appropriate in the strictest sense. Nonetheless, researchers often find them helpful in assessing the importance of differences between groups. The differences in the mean between economic base groups of every indicator reported here were statistically significant at least at the .01 level when F tests were calculated for analysis of variance tables.

[11]See, for example, Lee Rainwater, *What Money Buys: Inequality and the Social Meanings of Income* (New York: Basic Books, 1974).

[12]Transfer payments data and average earnings per worker data are from BEA, through the KEIS.

[13]See Gregory Jackson *et al, Regional Diversity: Growth in the United States, 1960-1990* (Boston, Ma.: Auburn Publishing Co., 1981); James C. Cobb, *The Selling of the South: The Southern Crusade for Industrial Development, 1936-1980* (Baton Rouge: Louisiana State University Press, 1982); Lonsdale and Seyler, *op. cit.*

[14]See Charles P. Kindleberger and Bruce Herrick, *Economic Development*, 3rd ed. (New York: McGraw Hill, 1977).

[15]Bowman and Haynes, *op. cit.*

APPENDIX

Economic Base Categories

Counties are categorized into particular economic bases according to the distribution of total labor and proprietors' income by place of work in 1980. The organization of the counties by economic base reflects their contemporary economic base, and does not represent the categorization of counties by economic base that would result if 1959 data were used. Similarly, the analysis does not consider changes that may have occurred in the economic bases over the twenty-year period. Decisions about the criteria were made on the basis of several considerations. Consistent with economic base theory, only those industrial sectors that clearly export goods or services are included as relevant for analyzing the economic base of counties. See Charles M. Tiebout, *The Community Economic Base Study*, Supplementary Paper No. 16, Committee for Economic Development (New York, December 1962).

In this analysis of rural Kentucky, the basic industries have been defined as the goods-producing sectors of farming, mining, and manufacturing, and the service-producing sector of government. Although non-government service-producing sectors (such as retail and wholesale trade, financial and real estate services, etc.) provide about one third of all labor and proprietors' income in rural Kentucky, these sectors have not been considered key to economic growth because they usually serve internal markets and circulate money within the county rather than bringing in money from outside the area of analysis. (While this assumption may no longer hold for urban areas, it is probably still valid for rural areas.)

FARM counties are those in which 20 percent or more of all labor and proprietors' income came from agriculture in 1980. The average proportion of farm income within this group is 27 percent, while the average contribution of farm income to total labor and proprietors' income over all the nonmetropolitan counties is 5.6 percent. The 23 farm counties are Adair, Bath, Bracken, Breckenridge, Butler, Edmonson, Fleming, Garrard, Green, Hart, Henry, Jackson, Larue, Lincoln, Menifee, Metcalfe, Owen, Owsley, Robertson, Rockcastle, Spencer, Trimble, and Washington.

COAL counties are those in which 20 percent or more of all labor and proprietors' income in 1980 came from the mining sector. There are three exceptions to this criterion. Livingston County has 21 percent of its income from mining, but the mining is in limestone rather than coal mining; therefore, for the purposes of this analysis, Livingston County is not included in the mining group. Whitley County has only 17 percent of its income from mining, but over 1 million tons of coal were mined in the county in 1980, and mining represents the biggest sector even though it does not meet the 20 percent criterion; it is assigned to the coal group. Knox County also produces over 1 million tons of coal, and it does not meet the cut-off criteria for any sector; therefore, it is placed in the coal group. Two counties which produce over a million tons of coal also meet other sectors' criteria and therefore are allocated to those other sectors: Butler to farming and Laurel to manufacturing. Among the coal counties, the average proportion of income from mining is 44 percent, while for all nonmetropolitan counties the average is 17 percent. The 24 coal counties are Bell, Breathitt, Clay, Elliott, Floyd, Harlan, Hopkins, Johnson, Knott, Knox, Lee, Leslie, Letcher, McCreary, Magoffin, Martin, Morgan, Muhlenberg, Ohio, Perry, Pike, Union, Webster, and Whitley.

MANUFACTURING makes up a larger proportion of rural Kentucky's labor and proprietors' income overall, so the criterion for determining that manufacturing is the dominant industry is 25 percent of the total. The average for all nonmetropolitan counties is 20 percent, and the sector is more broadly distributed across counties than coal or agriculture. Within the manufacturing group, the percent of labor and proprietors' income from manufacturing is 36 percent. The 39 manufacturing counties are Allen, Anderson, Ballard, Barren, Boyle, Caldwell, Carroll, Casey, Clinton, Crittenden, Cumberland, Fulton, Graves, Grayson, Hancock, Harrison, Hickman, Laurel, Lewis, Logan, McLean, Madison, Marshall, Mason, Meade, Mercer, Monroe, Montgomery, Nelson, Nicholas, Pendleton, Pulaski, Shelby, Simpson, Taylor, Todd, Trigg, Warren, and Wayne.

GOVERNMENT-MIXED INDUSTRY is a residual category which includes those counties which do not meet the criteria for farm, coal, or manufacturing. In some cases the largest proportion of labor and proprietors' income is from the government sector (e.g., in Franklin and Lyon), and in other cases there is a mix of industrial sectors without any one sector meeting the criteria for farm, manufacturing or coal (e.g., Calloway and Carter). In at least one other case there is little reported labor and proprietors' income by sector (e.g., Wolfe). In this group, government makes up 24 percent of all labor and proprietors' income and manufacturing makes up 16 percent. Government makes up 18.2 percent of income in all 103 rural counties, and, as mentioned above, manufacturing makes up 20 percent. The 17 counties in the government-mixed category are Calloway, Carlisle, Carter, Estill, Franklin, Gallatin, Grant, Hardin, Lawrence, Livingston, Lyon, McCracken, Marion, Powell, Rowan, Russell and Wolfe.

(continued from page 1)

ment through May. These data correspond to the rebound in personal consumption expenditures that has been fueling the national recovery in the second quarter. Similarly, Kentucky motor vehicle usage tax receipts were up almost 19 percent through May, reflecting an almost 25 percent increase in new car registrations through April. Cumulative individual and corporate income tax receipts through May also reflected growth in the Kentucky economy; they were running 7.9 and 8.2 percent, respectively, above last fiscal year.

Overall, the somewhat conflicting economic indicators: the demonstrated strength of the national economy continuing into the second quarter of 1984, despite the increases in interest rates; the adjustments in monetary policy exercised by Federal Reserve Chairman Volcker; and external factors such as weather conditions and political unrest in the Middle East and Central America, combine to present a somewhat cloudy picture of the national economy. It has performed better than earlier forecasts had predicted and the growth rate has exceeded past patterns. Nonetheless, the above factors suggest a more modest rate of growth for the remainder of 1984.

In other words, it is doubtful that the robust recovery of the first months of 1984 can be sustained. Rather, a return to a more moderate national growth rate of 4 to 5 percent for the year is indicated, with the full effect of the recent monetary controls not in evidence until the end of 1984 and the beginning of 1985. For the Kentucky economy, the tax picture described above, as well as the labor force estimates, indicate that the Commonwealth has begun to follow the national recovery, a pattern that should continue through the rest of 1984.

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- the emergence of the General Assembly as a full partner, with the Governor, in the budget process;
- the proliferation of participant players in the budget process, particularly interest groups;
- the increased attention focused on the budget by the media, especially coverage by Kentucky Educational Television;
- the significantly enhanced role of the Judicial Branch in shaping budget policy and procedure; and
- the transformation of the state budget from basically a management tool and fiscal control mechanism to the primary vehicle for policy and political agenda setting in state government.

Finally, as enactment of the 1984-86 state budget clearly demonstrated, the budget problems facing the Commonwealth are essentially political problems. Technically, there are no obstacles to addressing squarely the state's fiscal plight; these matters simply remain questions of political decision making.

Note: All quantitative data, statistics, and financial information in this paper were drawn from Governor's Office for Policy and Management internal reports or documents published by the Commonwealth of Kentucky. Principal sources included Kentucky Executive Budgets (biennial), Kentucky Budgets of the Commonwealth (biennial), and Kentucky Financial Reports (annual).

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Commuting in Kentucky*

One out of every five Kentucky workers held a job outside of his or her county of residence in 1980. These data, based upon the 1980 Census of Population, are among the statistics included in *Commuting in Kentucky*, published recently by the Kentucky Department of Economic Development. Included in this publication are data on the number of workers, 16 years and older, who commute into and out of each Kentucky county, by county of origin and destination, including to or from adjoining states. Additional tables show the number of workers in each county who drive alone to work, participate in carpools, use public transportation, walk to work, or work at home.

A section on interstate commuting shows that approximately 71,900 Kentuckians commuted to jobs outside the state, while about 69,980 workers from adjoining states commuted to jobs in Kentucky. Nearly two-thirds of the out-commuters travelled to Ohio, while Indiana, followed by Tennessee and then Ohio, furnished most of the in-commuters.

Copies of this publication may be obtained from the Kentucky Department of Economic Development, Maps and Publications Office, 133 Holmes Street, Frankfort, Kentucky 40601. The cost is $4.00 per copy, plus $0.20 sales tax if delivery is within Kentucky.

** The above information was prepared by Ronald Morgan, Branch Manager, Division of Research, Kentucky Department of Economic Development.*

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The Bureau of Economic Analysis, U.S. Department of Commerce, has recently issued its annual release of county-level personal income and employment estimates. At this time, data for 1982 have been issued for the first time, and data for 1980 and 1981 have been revised. These data represent 128 time series for each county and have been stored in the county database, the CBANK, of the Kentucky Economic Information System. There has been some redefinition of series in the transfer payments section, as well as some reorganization of the series. Users should therefore run a new CBANK Index before proceeding to access these data. For further information, please call the KEIS Manager, (606) 257-7675.

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SELECTED ECONOMIC AND SOCIAL INDICATORS: KENTUCKY AND THE U.S.

Item	Kentucky's Rank in U.S.	Kentucky	U.S.
*Total population, 1980	23rd	3,660,777	226,545,805
Land area, 1980	37th	39,669 sq.mi.	3,539,295 sq.mi.
Population per square mile, 1980	23rd	92.3	64.0
*Percent change in population, 1970-1980	25th	13.7%	11.4%
Median age, 1980	34th	29.1 years	30.0 years
*Population 65 years old and over, 1980	26th	11.2% of population	11.3% of population
*Non-White population, 1980	33rd	7.7% of population	16.9% of population
Black population, 1980	23rd	7.1% of population	11.7% of population
Asian and Pacific Islander, 1980	39th	0.3% of population	1.5% of population
American Indian, Eskimo, and Aleut, 1980	39th	0.1% of population	0.6% of population
Spanish population, 1980	43rd	0.7% of population	6.4% of population
Metropolitan population, 1980	36th	44.5% of population	74.7% of population
Persons living in different State in 1975 (5 years old+), 1980	34th	9.0% of population	9.7% of population
*Birth rate, 1979[1]	19th	16.7	15.9
*Death rate, 1979[1]	17th	8.9	8.5
Marriage rate, 1980[1]	32nd	9.7	10.9
Divorce rate, 1980[1]	29th	4.8	5.3
Legal abortions per 1,000 live births, 1980	41st	215	428
Physicians per 100,000 population, 1980	39th	133	185
Hospital beds per 100,000 population, 1980	39th	513	602
Personal health care expenditures per capita, 1978	49th	$542	$745
Total housing units, 1980	23rd	1,369,125	88,411,263
Year-round housing units, 1980			
Built between 1970 and 1980	26th	28.7%	26.2%
Prior to 1940	24th	24.7%	25.8%
With 5 or more units in structure	37th	10.1%	17.5%
With air conditioning	22nd	61.7%	55.0%
Homeownership rate, 1980	15th	70.0%	64.4%
Median value of specified owner-occupied housing units, 1980	47th	$34,200	$47,200
Median gross rent of specified renter-occupied housing units, 1980	45th	$198	$243
Crime rate, 1981[2]	47th	3,532	5,800
Federal and state prisoners per 100,000 population, 1981	27th	114	153
Public elementary and secondary schools, 1981			
Expenditures per capita	49th	$287	$434
Current expenditures per pupil	46th	$1,569	$2,350
Public school teachers salaries, 1982	30th	$17,200	$19,000
Percent high school graduates (persons 25 years+), 1980	50th	53.1%	66.5%
Undergraduate enrollment in institutions of higher education, 1979	30th	104,014	8,820,657
*Civilian labor force, 1981[3]	23rd	1,662,000	108,670,000
*Unemployment rate, 1981	12th	8.1%	7.6%
Manufacturing employment, 1979			
*Number[4]	23rd	312,022	21,914,754
*Percent of nonagricultural wage and salary employment	22nd	22.5%	22.4%
*Average weekly earnings of production workers in manufacturing, 1981	30th	$309	$318

SELECTED ECONOMIC AND SOCIAL INDICATORS: KENTUCKY AND THE U.S.

Item	Kentucky's Rank in U.S.	Kentucky	U.S.
Median household money income, 1979	45th	$13,965	$16,841
Per capita money income, 1979	44th	$5,978	$7,298
Percent below poverty level, 1979			
Persons	6th	17.6%	12.4%
Children under 18 years	6th	21.6%	16.0%
State and local governments, 1981			
*Expenditures, total	24th	$6.4 bil.	$487.0 bil.
*Expenditures per capita	41st	$1,757	$2,150
*Tax revenues per capita	45th	$788	$1,079
*Debt per capita	13th	$2,042	$1,606
*Federal Government expenditures per capita, 1981	42nd	$1,956	$2,414
Percent of voting-age population casting votes for President, 1980	37th	50.2%	53.2%
*Motor vehicles per 1,000 population 1980	28th	726	713
Means of transportation to work, 1980			
Percent of workers commuting in carpools	13th	22.8%	19.7%
Percent using car, truck, or van	18th	88.1%	84.1%
Motor vehicle traffic fatalities per 100,000 licensed drivers, 1980	16th	40	35
Energy consumption per capita, 1980	17th	371 mil. Btu	334 mil. Btu
Temperature, average annual	15th	56.5° F.	53.2° F.
Precipitation, average annual	10th	46.8 in.	28.8 in.
Farms, 1978			
*Number	4th	109,980	2,478,642
*Land in farms	23rd	15.0 mil. acres	1,029.7 mil acres
*Acreage per farm, 1982	44th	144 acres	433 acres
*Average value of farm land and buildings per acre, 1982	23rd	$996	$788
*Gross farm income, 1981	20th	$3.2 bil.	$161.2 bil.
*Mineral production, value 1980	9th	$4.5 bil.	$143.9 bil.
*Construction contracts, value 1981	14th	$3.4 bil.	$150.2 bil.
*Manufacturing shipments, value 1980	22nd	$28.8 bil.	$1,850.9 bil.
Manufacturing employment, 1980			
Export related[5]	33rd	2.6%	3.6%
Defense related[6]	38th	0.1%	3.6%
Retail sales per capita, 1977	44th	$2,935	$3,291

*Data items that are starred (*) are estimated at least annually and the Kentucky time-series are included in the database of the Kentucky Economic Information System (KEIS); therefore, data for years other than those given above are available for these items.

[1]Per 1,000 resident population

[2]Per 100,000 resident population

[3]Data have been revised recently by the Kentucky Cabinet for Human Resources and indicate that there were 1,669 thousand persons in the Kentucky civilian labor force in 1981. The above figure has been retained for publication here in order to be comparable to the data for the U.S. and to the relative rank of Kentucky in the U.S.

[4]More recently revised data indicate that manufacturing employment in Kentucky in 1979 was 297,158.

[5]Percent of total private sector employment

[6]Percent of all manufacturing employment

SOURCE: These data have been compiled and distributed by the Statistical Compendia Staff, Data User Services Division, Bureau of the Census, U.S. Department of Commerce, 1983.

KENTUCKY ECONOMIC INFORMATION SYSTEM

KENTUCKY COUNTIES IN RANK ORDER

1982 PER CAPITA PERSONAL INCOME, BY PLACE OF RESIDENCE

RANK	COUNTY	VALUES	RANK	COUNTY	VALUES	RANK	COUNTY	VALUES
1	BOURBON	12788.000	41	OLDHAM	8244.000	81	BRECKINRIDGE	6760.000
2	WOODFORD	12213.000	42	OHIO	8214.000	82	OWEN	6743.000
3	FAYETTE	11390.000	43	GREENUP	8211.000	83	LAUREL	6705.000
4	JEFFERSON	11312.000	44	HARDIN	8198.000	84	BUTLER	6669.000
5	FRANKLIN	10980.000	45	LIVINGSTON	8197.000	85	LETCHER	6537.000
6	HOPKINS	10777.000	46	JESSAMINE	8126.000	86	LAWRENCE	6469.000
7	BOYD	10515.000	47	WARREN	8053.000	87	FLEMING	6445.000
8	MCCRACKEN	10452.000	48	GARRARD	8046.000	88	ROBERTSON	6387.000
9	CAMPBELL	10364.000	49	CARLISLE	8000.000	89	ROWAN	6266.000
10	WEBSTER	10364.000	50	MARTIN	7920.000	90	KNOTT	6219.000
11	HENDERSON	10287.000	51	CALLOWAY	7916.000	91	ADAIR	6181.000
12	DAVIESS	10253.000	52	NELSON	7897.000	92	CLAY	6166.000
13	KENTON	10098.000	53	GRANT	7888.000	93	MARION	6163.000
14	SIMPSON	9721.000	54	BARREN	7883.000	94	CUMBERLAND	6153.000
15	MUHLENBERG	9631.000	55	TAYLOR	7882.000	95	LINCOLN	6110.000
16	CARROLL	9409.000	56	JOHNSON	7872.000	96	MONROE	6032.000
17	UNION	9372.000	57	MONTGOMERY	7666.000	97	HART	5973.000
18	CLARK	9316.000	58	LARUE	7642.000	98	POWELL	5948.000
19	BOONE	9273.000	59	ALLEN	7574.000	99	BREATHITT	5852.000
20	SCOTT	9195.000	60	PERRY	7547.000	100	MEADE	5814.000
21	ANDERSON	9095.000	61	PENDLETON	7450.000	101	MAGOFFIN	5642.000
22	SHELBY	8913.000	62	PULASKI	7401.000	102	RUSSELL	5636.000
23	BOYLE	8909.000	63	BELL	7397.000	103	CARTER	5613.000
24	FULTON	8898.000	64	LYON	7374.000	104	LESLIE	5538.000
25	CALDWELL	8842.000	65	HARLAN	7369.000	105	KNOX	5532.000
26	MCLEAN	8799.000	66	TRIMBLE	7329.000	106	MORGAN	5422.000
27	MASON	8747.000	67	MADISON	7281.000	107	WAYNE	5363.000
28	HARRISON	8682.000	68	GREEN	7279.000	108	LEWIS	5343.000
29	TRIGG	8664.000	69	NICHOLAS	7234.000	109	EDMONSON	5330.000
30	CHRISTIAN	8644.000	70	TODD	7229.000	110	LEE	5329.000
31	HANCOCK	8632.000	71	BRACKEN	7185.000	111	WOLFE	5303.000
32	GRAVES	8586.000	72	WHITLEY	7177.000	112	ROCKCASTLE	5245.000
33	LOGAN	8554.000	73	BULLITT	7046.000	113	METCALFE	5237.000
34	MERCER	8371.000	74	FLOYD	6963.000	114	CASEY	5222.000
35	CRITTENDEN	8370.000	75	HICKMAN	6925.000	115	ELLIOTT	5023.000
36	SPENCER	8355.000	76	WASHINGTON	6852.000	116	CLINTON	4927.000
37	HENRY	8353.000	77	BATH	6822.000	117	JACKSON	4818.000
38	BALLARD	8324.000	78	ESTILL	6813.000	118	MENIFEE	4575.000
39	MARSHALL	8305.000	79	GALLATIN	6805.000	119	MCCREARY	4522.000
40	PIKE	8245.000	80	GRAYSON	6803.000	120	OWSLEY	4464.000

SOURCE: U.S. DEPT. COMMERCE, BUREAU OF ECONOMIC ANALYSIS

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